

1.0 PURPOSE AND NEED FOR ACTION

The following sections describe the purpose and need and provide background information for this environmental assessment (EA).

1.1 PURPOSE AND NEED

The U.S. Department of Energy, Richland Operations Office (DOE-RL) needs to improve management of post-1970, contact-handled (CH) suspect transuranic (TRU) waste containers (primarily drums) that are stacked in modules and covered with soil in the Low-Level Burial Grounds (LLBG).

1.2 BACKGROUND

In 1970, the U.S. Atomic Energy Commission (AEC) defined TRU waste as a separate waste category and declared that TRU waste must be retrievably stored. In 1973, the AEC determined (AEC Order 0511) that waste containing plutonium might be associated with increased hazards and should be disposed of in facilities that provide a greater level of containment than the type of shallow land burial typically used for LLW. Beginning at that point, suspect-TRU waste (identified at that time as waste likely to contain greater than 10 nanocuries per gram of transuranic radionuclides) was separated from other LLW and retrievably stored in designated areas in the 200 Areas burial ground facilities. The definition of TRU waste was changed in 1984 to specify only waste containing greater than 100 nanocuries per gram of transuranics; therefore, some of the suspect TRU waste initially placed in storage would now be LLW. The proposed action would occur in the 200 West Area of the Hanford Site (Figure 1) in the 218-W-4B and 218-W-4C LLBG (Figure 2).

The 218-W-4B LLBG (Figure 3) in the 200 West Area became active in 1967, and was last used in 1990. The 218-W-4B LLBG received packaged waste materials from 200 West Area operations, other onsite areas, and from offsite. Suspect TRU waste first went into a concrete 'V' trench (Figure 4) in 1972. This trench was designated Trench V7. Since then, V7 has become a section or part of Trench 7. However, the asphalt slab (Figure 5 and 6) trench concept was adapted and first used in this burial ground later in 1972.

The 218-W-4C LLBG (Figure 7), also in the 200 West Area, first received waste in March 1978, and is still active. This LLBG received packaged waste materials from 200 West Area operations, other onsite areas, and from offsite.

During 1995, *Environmental Assessment Solid Waste Retrieval Complex, Enhanced Radioactive and Mixed Waste Storage Facility, Infrastructure Upgrades, and Central Waste Support Complex, Hanford Site, Richland, Washington*, DOE/EA-0981, was prepared to support retrieval of some soil covered TRU containers. However, this retrieval activity was never implemented.

Retrieval of covered drums is a continuation of retrieval activities for uncovered drums in the same trenches. Relocation of TRU waste drums from the LLBG to other TSD facilities in support of uncovered retrieval activities commenced in 1996. The retrieval and assay of uncovered drums, beginning in 1999, has resulted in over 700 suspect-TRU waste drums being redesignated as TRU waste or LLW. These activities were considered to be responsive to existing NEPA Documentation that evaluated retrieval of TRU waste (DOE/EIS-0113). Approximately 1100 waste containers from the uncovered portion of these LLBG have been relocated to other TSD units since uncovered retrieval activities began in the 1990's.

A number of uncovered drums remain in the 218-W-4C LLBG. Of these drums, some have been assayed and designated as TRU or LLW, and some have not been assayed. Plans are to assay and designate the remaining uncovered drums and transfer the remaining TRU waste designated drums to the Central Waste Complex (CWC) in the 200 West Area or another TSD unit for storage by the end of summer 2002.

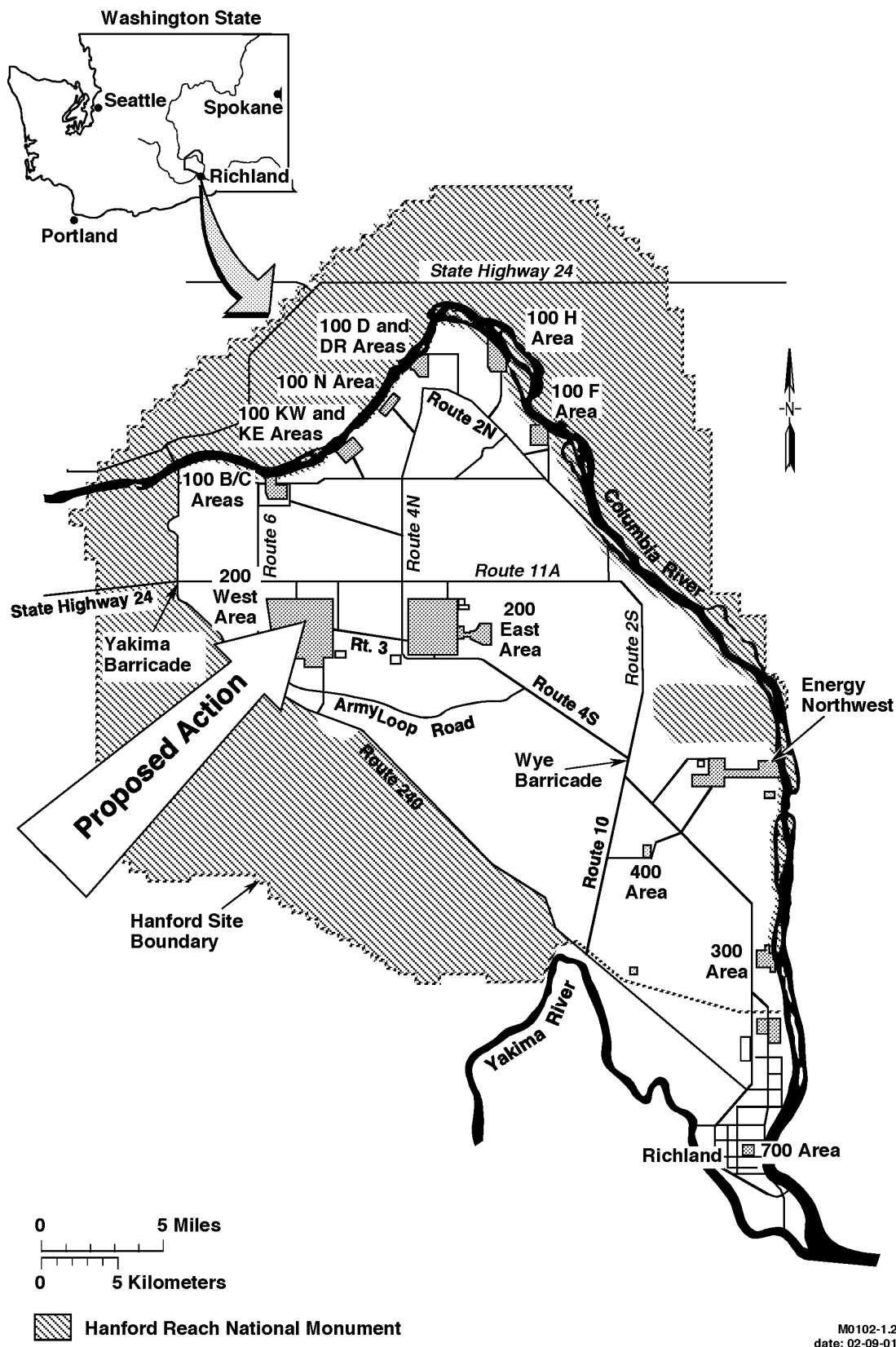


Figure 1. Hanford Site.

Figure available upon request.

Figure 2. 200 West Area.

Figure available upon request.

Figure 3. Location of Trench 7 and V7 in 218-W-4B Low-Level Burial Grounds.



Figure 4. TRU Retrievable Storage – V7 in 218-W-4B Low-Level Burial Grounds (Circa 1970's).

Figure available upon request.

Figure 5. Typical Post-1970 TRU Interim Storage (Cross-Section).



Figure 6. TRU Retrievable Storage (Typical Configuration)
in 218-W-4B and 218-W-4C Low-Level Burial Grounds.

Figure available upon request.

Figure 7. 218-W-4C Low-Level Burial Grounds.

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